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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,548	06/29/2001	Junichi Matsushita	010851	4476

23850 7590 02/13/2003

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EXAMINER

PRITCHETT, JOSHUA L

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/893,548

Applicant(s)

MATSUSHITA ET AL.

Examiner

Joshua L Pritchett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

Applicant's election without traverse of claims 1-9 in Paper No. 5 is acknowledged.

Claim 10 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 5.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arnett (US 5,136,676) in view of Riser (US 5,832,151) and Savage (US 6,428,216).

Regarding claim 1, Arnett teaches a light-leading path to transmit light from one point to another. Arnett further teaches an outer tube portion (46) extending in the direction of the optical axis over the whole tube. Arnett lacks the claimed conic shape. Riser teaches a light-leading path in a flat-headed conic shape for transmitting light to or from a transmitting or receiving module (Fig. 3). Arnett further lacks the claimed radial projecting portion being on the

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side of the optical fiber. Savage teaches a peripheral projection (30) extending in a radial direction at the end of the fiber located on the side of the fiber. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the light leading path taught by Arnett have the conic shape taught by Riser and the peripheral projection taught by Savage for the purpose of transmitting the exiting light from the path to a more precise location and properly position the light leading path with respect to the transmitting or receiving module.

Regarding claim 2, Arnett teaches the projecting portion circularly formed and coaxial with the light-leading path (Fig. 3a). Arnett further teaches the outer tube being cylindrical and coaxial with the light-leading path (Fig. 3a).

Regarding claim 3, Arnett teaches the outer tube diameter being constant (Fig. 3a).

Regarding claim 4, Arnett teaches the outer tube has flange (38) projecting circularly in the radial direction (Fig. 3a).

Regarding claim 5, Arnett in combination with Riser teaches the invention as claimed but lacks reference to a convex lens at one end of the path. Savage teaches the use of a convex lens (14) at the end of a light-leading path to direct the light into the path. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the convex lens taught by Savage in the Arnett in combination with Riser invention for the purpose of directing the light into the path.

Regarding claim 6, Arnett in combination with Riser teaches the invention as claimed but lacks reference to the convex lens not projecting over an optical side of the path. Savage teaches the convex lens not projecting over the optical side of the path (Fig. 1). It would have been

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obvious to a person of ordinary skill in the art at the time the invention was made to combine the convex lens of Savage with the invention of Arnett in combination with Riser for the purpose of direction light into the optical path of the Arnett invention.

Regarding claims 7-9, Arnett in combination with Riser teaches the invention as claimed but lack reference to the transmitting portion being smaller than the receiving portion of any light exchanged between the path and the receiving or transmitting module. Savage teaches that the transmitting source should be smaller than the receiving source at either end of the path. Savage's light emitting source (15) is smaller than the receiving end of the path (13) and the path is smaller than the end receiving face (12). Savage also shows the reason for the need to have the light transmitting object be smaller than the light-receiving object with the light rays (23-27) as they disperse once they exit the transmitting source (Fig. 1). Optical paths that are capable of transmitting light in either direction are commonly known in the art and therefore it is within the skill of one ordinarily skilled in the art to have light incident either end of the light-leading path, therefore the direction of light transmission is not given significant patentable weight. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Savage that light transmitting sources must be smaller than light receivers with the Arnett in combination with Riser invention for the purpose of transferring all the light from the transmitter to the receiver without the loss of information.

### ***Conclusion***

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L Pritchett whose telephone number is 703-305-7917.

The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on 703-308-1687. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JLP

February 5, 2003

  
**James Phan**  
**Primary Examiner**